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EXAMINER

CHBOUKI, TAREK

ART UNIT

PAPER NUMBER

2165

NOTIFICATION DATE

DELIVERY MODE

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ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

candy\_sanders@i2.com  
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<b>Office Action Summary</b>	<b>Application No.</b> 09/895,654	<b>Applicant(s)</b> TENORIO, MANOEL	
	<b>Examiner</b> TAREK CHBOUKI	<b>Art Unit</b> 2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 29-52 and 54-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29-52 and 54-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***DETAILED ACTION***

***Remarks***

1. The amendment filed on July 27, 2009 has been received and entered. Claims 29-52 and 54-56 are now pending and claims 1-28 and 53 are cancelled.

**Response to Amendment**

2. This Office action has been issued in response to amendment filed on 07/27/2009. Claims 29-52 and 54-56 are pending. Applicants' arguments have been carefully and respectfully considered and found not persuasive. Accordingly, this action has been made FINAL.

**Response to Arguments**

3. Since claim 53 is cancelled, 35 USC 112 rejection is cancelled.

In light of Applicant's argument/remark stating the computer-readable medium is direct to a computer/computer hardware, the 35 USC 101 rejection made against claims 45-53 is withdrawn.

With respect to the repeating Applicant's argument stating that the 103(a) references do not teach or suggest "mapping module, wherein the mapping module is configured to receive information regarding a source schema and a target schema, the source and target schemas each comprising a taxonomy comprising a hierarchy of classes into which products are categorized, wherein the target schema comprises a different taxonomy than the taxonomy of the source schema, at least the source schema further comprising a product ontology associated with one or more of the classes, each product ontology comprising one or more product attributes". Examiner respectfully disagrees and requests Applicant to refer to the below mentioned counter arguments:

Livesay alone in paragraph 0079 discloses:

(File transfer of information, data, files, or other attachments to project Parameters generated on buyer applications external to the inventive system may be facilitated through the

Art Unit: 2165

present inventive system by translating the data into an industry standard format such as XML or EDI. In this manner data can be imported into the present system for manipulations and translation into desired Parameters. The Parameters may further be transformed into data suitable for export to systems operated by partners or sellers for seller use in outside modeling applications to generate information necessary to complete a proposal. Such data formatting may also allow sellers to provide supporting documentation for proposals to buyers for review. This ability to import data from multiple sources into the system workflow and provide supporting documentation in the form of attachments allows users to save considerable time and effort in defining the Parameters of the project or services within the inventive system). Examiner is interpreting the translation of data (source) into an industry standard format such as XML or EDI (target) is the mapping process as claimed. Furthermore, one ordinary skill in the art would conclude that in EDI environment, the EDI data (X12, EDIFACT...) are processed through a mapping tool in order to handle the data coming from the requester and provider entities. Furthermore EDI data can be translated to XML.

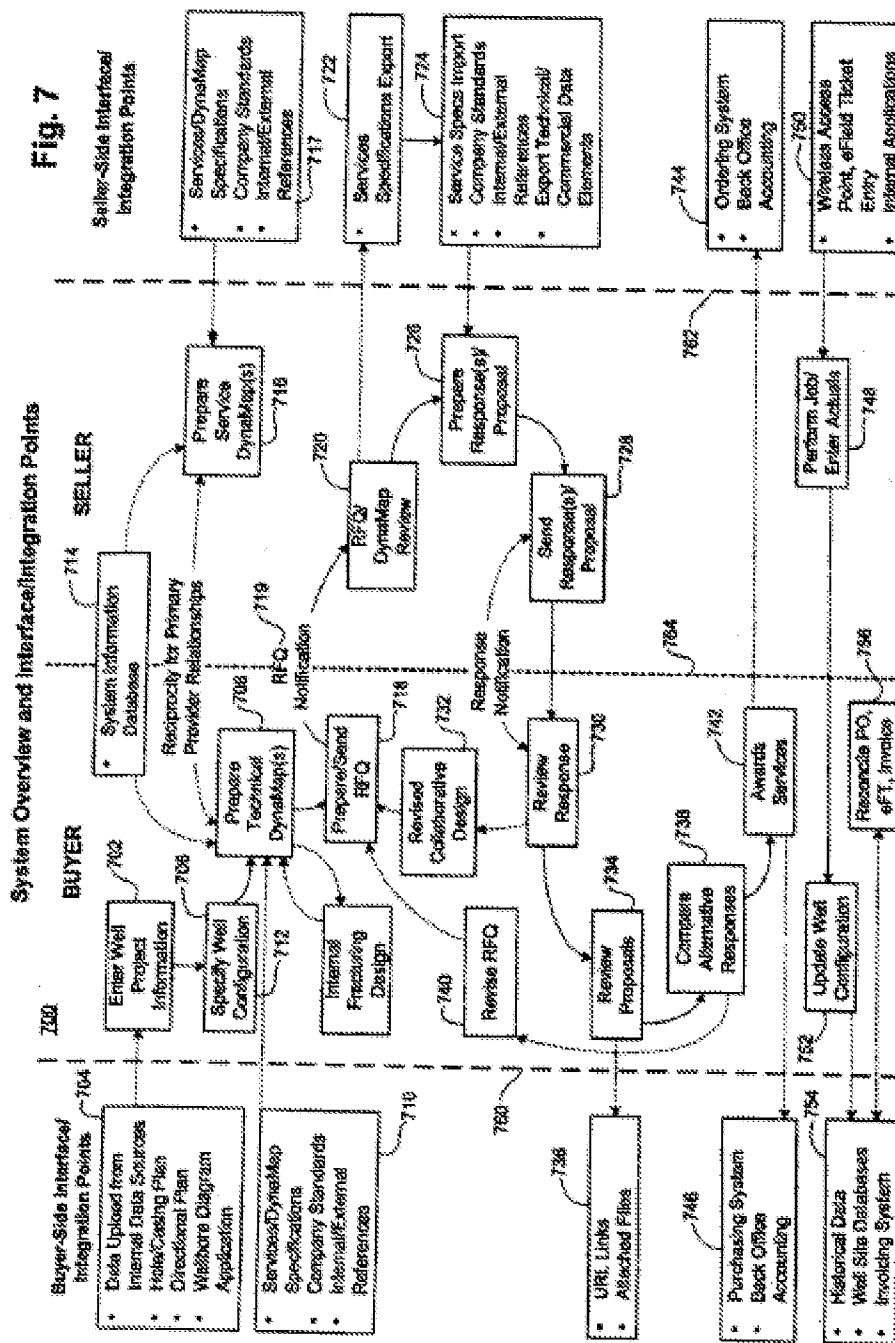
Furthermore in paragraph [0150], livesay discloses:

(Once all of the necessary components of a request are completed and assembled, the RFQ is sent 718, along with any additional information or data attachments, to appropriate or chosen sellers, who are then notified 719 by the IBE system 700 that such an RFQ has been made. The RFQ, including any Technical DynaMaps.TM. and attachments are then reviewed 720 by the seller in order to prepare a response (i.e., a proposal) or an alternate proposal for the buyer. The seller may prepare the response by exporting to seller-side systems 722 the data from the technical DynaMaps.TM. and any attachments. The seller can analyze and manipulate the buyer's data as need be using the sellers own applications and thereby determine an appropriate response. When the data is analyzed, the seller may import it back into the IBE system 726 for

Art Unit: 2165

integration into a response or proposal 726. Similar to the buyer-side, the IBE system 700 can translate the seller's data to populate the templates necessary to respond to and RFQ, The seller may also import other information 724 into the IBE system 700, for example, industry or company standards, internal or external references, or other technical or commercial data. This additional information may be translated to become part of the response templates 726, provided as attachments to the response, or provided as reference links in the response allowing the buyer to access that information directly from the seller or from a third party source). Once more Livesay discloses the data manipulation of the buyer/seller (source/target) and the translation of data to populate response templates which is mapping between source and target data as claimed.

Furthermore Livesay's FIG. 7 illustrates a system of intergrading/translating data (mapping) between seller/buyer .



Furthermore, Sawamy at least in (FIG. 11 and Column 2, lines 58-66) teach the map used to convert from format to another.

With respect to Applicant's arguments stating that the 103(a) reference do not teach or suggest

receive information regarding a source schema and a target schema, the source and target schemas each comprising a taxonomy comprising a hierarchy of classes into which products are categorized, wherein the target schema comprises a different taxonomy than the taxonomy of the source schema, at least the source schema further comprising a product ontology associated with one or more of the classes, each product ontology comprising one or more product attributes". Examiner respectfully disagrees. Livesay discloses:

receive information regarding a source schema and a target schema, the source and target schemas each comprising a taxonomy comprising a hierarchy of classes into which products are categorized, at least in Livesay discloses (FIG. 5 and paragraph [0019],

(The present invention also preferably utilizes databases of sellers within which profiles have been established to determine which sellers and which either goods or services, or goods and services are to be targeted to the various buyers at any time via a Profile Link. For example, a database on seller XYZ may indicate that XYZ provides goods in categories 1, 2 and 3. When buyer ABC accesses an on-line site or an application wherein goods in category number 2 are utilized, the present invention recognizes that XYZ provides such goods, and provides targeted marketing about XYZ's capabilities or products to ABC, via a Profile Link, provided with the information page ABC is currently reviewing. The present invention may also recognize that ABC, for whatever reason, does not wish to engage in business with XYZ, or vice versa and thus, does not provide a Profile Link to XYZ's information. Thus, the present invention utilizes Profile Links to target the marketing of either goods or services, or goods and services to those

Art Unit: 2165

most likely in need of such goods or services, or goods and services, especially while a buyer is actively pursuing the procurement of such goods or services, or goods and services.). Referring to Applicant's specification on page 3 line 24-29, ordinary skill in the art would conclude that the grouping of good or services in categories provided in a profile which are stored in a database is the taxonomy comprising a hierarchy of classes into which products are categorized as claimed.

wherein the target schema comprises a different taxonomy then the taxonomy of the source schema.

At least in FIG. 7 and paragraphs [0019] and [0100], wherein the process of converting file into a data file compatible indicates that the source and target data are different.

Indicate at least the source schema further comprising a product ontology associated with one or more of the classes, each product ontology comprising one or more product attributes

At least in FIG. 3C, 5 and paragraphs [0019] and [0109], wherein the grouping of goods and services after identifying dependencies/condition is the ontology comprising one or more product attributes.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



Art Unit: 2165

4. Claims 29-52 and 54-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Livesay, Jeffery et al (hereinafter Livesay) US Publication No 20080126265 in view of Swamy, Shekhar N. et al (hereinafter Swamy) US Patent No. 6874141.

As per claim 29, Livesay discloses:

**An electronic commerce system, comprising:**

**a global content directory server**(Abstract: lines 1-2 and FIG. 4, components 401 and 406)  
**coupled with one or more seller databases over a network, the global content directory server**  
**providing a plurality of buyer computers access to the one or more seller databases,**

(Paragraphs [0088] and [0129], indicate global content directory (FIG. 4, components 401 and 406)  
providing the buyer access to the seller database).

**the global content directory server comprising:**

**a storage medium stored therein a schema translation tool comprising:**

**a storage medium stored therein a mapping module configured to:**

**receive information regarding a source schema and a target schema, the source and target**  
**schemas each comprising a taxonomy comprising a hierarchy of classes into which products are**  
**categorized** (FIG. 5 and paragraph [0019], indicate the plurality of schema (XML data files) (buyer and  
seller) wherein the profile content grouping parameter is (taxonomy hierarchy of classes)).

**wherein the target schema comprises a different taxonomy then the taxonomy of the source**  
**schema** (Paragraph [0019], indicate the plurality of schema having different profile content (taxonomy  
data)).

**at least the source schema further comprising a product ontology associated with one or**  
**more of the classes, each product ontology comprising one or more product attributes** (FIG. 5 and

Art Unit: 2165

paragraph [0019], illustrate the association of the buyer and seller based on profile content (product ontology) parameter (class)).

**and a storage medium stored therein an ontology generation module configured to generate a product ontology for each of the target classes based on the product ontologies of the associated source classes** (FIG. 5 and paragraph [0019], illustrate the association of the buyer and seller based on a "best fit" match (ontology association) of profile attributes(class)).

Livesay discloses receiving data and translating (mapping) to standard XML or EDI (Paragraph [0079]) but does not go into detail regarding the mapping tool product, however in an analogous art of data mapping/translating, Swamy teaches:

**and associate one or more source classes of the source schema with one or more target classes of the target schema** (FIG. 11 and Column 2, lines 58-66).

Therefore, it would have been obvious to a person in the ordinary skill in the art at the time of the invention to combine Livesay and Swamy by incorporating the teaching of Swamy into the system of Livesay. One having ordinary skill in the art would have found it motivated to use the mapping tool of Swamy into the system of Livesay for the purpose of providing a hierarchical data mapping.

As per claim 30, Livesay and Swamy teach:

**The system of Claim 29, wherein the mapping module is further configured to:**

**receive input from at least one of the plurality of buyer computers indicating one or more source classes to be associated with one or more target classes** (Paragraph [0155], wherein the input parameter links buyer to seller)(Livesay).

**and associate the source classes with the target classes in response to the input from a user associated with at least one of the plurality of buyer computers** (Paragraph [0155], wherein the input parameter links buyer to seller)(Livesay).

Art Unit: 2165

As per claim 31, Livesay and Swamy teach:

**The system of Claim 30, wherein the mapping module is further configured to:**

**generate a graphical representation of the taxonomies of the source and target schemas, the graphical representation allowing at least one of the plurality of buyer computers to graphically associate classes of the source schema with classes of the target schema**

(Column 3, lines 1-7)(Swamy).

**and communicate the graphical representation to at least one of the plurality of buyer computers** (paragraph [0161])(Livesay) wherein the link is the graphical communication between buyer and seller).

As per claim 32, Livesay and Swamy teach:

**The system of Claim 29, wherein the source classes are leaf classes of the source schema** (FIG. 8A, wherein the bottom-up approach is leaf classes)(Swamy).

As per claim 33, Livesay and Swamy teach:

**The system of Claim 29, wherein the ontology generation module is further configured to generate a product ontology for a target class by determining the intersection of the product attributes included in the product ontologies of the associated source classes** (Paragraph [0136], wherein the determining profile link based on “best fit” profile content (product ontology) is determining association between product parameters between seller and buyer)(Livesay).

As per claim 34, Livesay and Swamy teach:

**The system of Claim 29, wherein the ontology generation module is further configured to generate a product ontology for a parent class of a plurality of target classes by determining the intersection of the product attributes included in the product ontologies of the target classes**

(Paragraph [0136], wherein the determining profile link with best fit criteria (ontologies) is determining association between product parameters between seller and buyer)(Livesay).

**the product ontologies of the target classes having been generated by the ontology generation module (FIG. 4 and FIG. 5)(Livesay).**

As per claim 35, Livesay and Swamy teach:

**The system of Claim 29, wherein:**

**at least the source schema further comprises a seller ontology associated with one or more of the classes, each seller ontology comprising one or more attributes associated with one or more sellers of a product** (Paragraph [0136], wherein the determining profile link with best fit criteria (ontologies) is determining association between product parameters (attributes) between seller and buyer)(Livesay).

**and the ontology generation module is further configured to generate a seller ontology for each of the target classes based on the seller ontologies of the associated source classes** (Paragraph [0136], wherein the determining profile link with best fit criteria (ontologies) is determining association between product parameters (attributes) between seller and buyer)(Livesay).

As per claim 36, Livesay and Swamy teach:

**The system of Claim 29, wherein:**

**one or more pointers identifying the one or more seller databases are associated with at least one source class** (Paragraphs [0088] and [0129], indicate the database product identification linking the buyer and seller)(Livesay).

**the one or more seller databases including product data associated with one or more products categorized in the source class** (Paragraphs [0088] and [0129], indicate the database product identification linking the buyer and seller)(Livesay).

**and the mapping module is further configured to associate the one or more pointers of the source class with one or more target classes associated with the source class**

(Column 3, lines 1-7)(Swamy).

As per claim 37, Livesay discloses:

**A computer-implemented method for translating between one or more schemas, comprising:**

**at least the source schema further comprising a product ontology associated with one or more of the classes, each product ontology comprising one or more product attributes;**

(Paragraph [0019], wherein the seller database (source schema) having goods in categories (attribute)).

**associating, by the server, one or more source classes of the source schema with one or more target classes of the target schema;**

(Paragraph [0019], wherein the profile link is the association of seller's (source schema) with the buyer (data, target schema)).

**and generating, by the server, a product ontology for each of the target classes based on the product ontologies of the associated source classes** (Paragraph [0019], wherein the profile link is the association of seller's (source schema) with the buyer (data, target schema)).

Art Unit: 2165

Livesay discloses receiving data and translating (mapping) to standard XML or EDI (Paragraph [0079]) but does not go into detail regarding the mapping tool product, however in an analogous art of data mapping/translating, Swamy teaches:

**receiving, by a server, information regarding a source schema and a target schema, the source and target schemas each comprising a taxonomy comprising a hierarchy of classes into which products may be categorized** (FIG. 11 and Column 2, lines 58-66).  
**wherein the target schema comprises a different taxonomy than the taxonomy of the source schema,** (Column 1, lines 22-28 and FIG. 11 and Column 2, lines 58-66).

Therefore, it would have been obvious to a person in the ordinary skill in the art at the time of the invention to combine Livesay and Swamy by incorporating the teaching of Swamy into the system of Livesay. One having ordinary skill in the art would have found it motivated to use the mapping tool of Swamy into the system of Livesay for the purpose of providing a hierarchical data mapping.

As per claim 38, Livesay and Swamy teach:

**The method of Claim 37, further comprising:**

**receiving input from at least one of a plurality of buyer computers indicating one or more source classes to be associated with one or more target classes** (Paragraph [0155], wherein the input parameter links buyer to seller)(Livesay).

**and associating the source classes with the target classes in response to the input from at least one of the plurality of buyer computers** (FIG. 11 and Column 2, lines 58-66)(Swamy).

As per claim 39, Livesay and Swamy teach:

**The method of Claim 38, further comprising:**

**generating a graphical representation of the taxonomies of the source and target schemas, the graphical representation allowing at least one of the plurality of buyer computers to graphically associate classes of the source schema with classes of the target schema**

(Column 3, lines 1-7)(Swamy).

**and communicating the graphical representation to at least one of the plurality of buyer computers** (paragraph [0161])(Livesay) wherein the link is the graphical communication between buyer and seller).

As per claim 40, Livesay and Swamy teach:

**The method of Claim 37, wherein the source classes are leaf classes of the source schema.**  
(FIG. 8A wherein the bottom-up approach is leaf classes)(Swamy).

As per claim 41, Livesay and Swamy teach:

**The method of Claim 37, further comprising generating a product ontology for a target class by determining the intersection of the product attributes included in the product ontologies of the associated source classes** (Paragraph [0136], wherein the determining profile link based on “best fit” profile content (product ontology) is determining association between product parameters between seller and buyer)(Livesay).

As per claim 42, Livesay and Swamy teach:

**The method of Claim 37, further comprising generating a product ontology for a parent class of a plurality of target classes by determining the intersection of the product attributes included in the product ontologies of the target classes** (Paragraph [0136], wherein the determining

Art Unit: 2165

profile link based on “best fit” profile content (product ontology) is determining association between product parameters between seller and buyer)(Livesay).

As per claim 43, Livesay and Swamy teach:

**The method of Claim 37, wherein:**

**at least the source schema further comprises a seller ontology associated with one or more of the classes, each seller ontology comprising one or more attributes associated with one or more sellers of a product** (Paragraph [0136], wherein the determining profile link with best fit criteria (ontologies) is determining association between product parameters between seller and buyer)(Livesay).

**and the method further comprises generating a seller ontology for each of the target classes based on the seller ontologies of the associated source classes.**

(Paragraph [0136], wherein the determining profile link with best fit criteria (ontologies) is determining association between product parameters (attributes) between seller and buyer)(Livesay).

As per claim 44, Livesay and Swamy teach:

**The method of Claim 37, wherein:**

**one or more pointers identifying the one or more seller databases are associated with at least one source class** (Paragraphs [0088] and [0129], indicate the database product identification linking the buyer and seller)(Livesay).

**the one or more seller databases including product data associated with one or more products categorized in the source class** (Paragraphs [0088] and [0129], indicate the database product identification linking the buyer and seller)(Livesay).

**and the method further comprises associating the pointers of the source class with one or more target classes associated with the source class** (Column 3, lines 1-7)(Swamy).



Art Unit: 2165

As per claim 45, Livesay discloses:

**A computer-readable medium embodied with software for translating between schemas, the software when executed using one or more computers is configured to:**

**at least the source schema further comprising a product ontology associated with one or more of the classes, each product ontology comprising one or more product attributes;**

(Paragraph [0019], wherein the seller database (source schema) having goods in categories (attribute)).

**associate one or more source classes of the source schema with one or more target classes of the target schema;**

(Paragraph [0019], wherein the profile link is the association of seller's (source schema) with the buyer (data, target schema)).

**and generate a product ontology for each of the target classes based on the product ontologies of the associated source classes** (Paragraph [0019], wherein the profile link is the association of seller's (source schema) with the buyer (data, target schema)).

Livesay discloses receiving data and translating (mapping) to standard XML or EDI (Paragraph [0079]) but does not go into detail regarding the mapping tool product, however in an analogous art of data mapping/translating, Swamy teaches:

**receive information regarding a source schema and a target schema, the source and target schemas each comprising a taxonomy comprising a hierarchy of classes into which products may be categorized** (FIG. 11 and Column 2, lines 58-66).

**wherein the target schema comprises a different taxonomy than the taxonomy of the source schema.** (Column 1, lines 22-28 and FIG. 11 and Column 2, lines 58-66).

Therefore, it would have been obvious to a person in the ordinary skill in the art at the time of the invention to combine Livesay and Swamy by incorporating the teaching of Swamy into the system of

Art Unit: 2165

Livesay. One having ordinary skill in the art would have found it motivated to use the mapping tool of Swamy into the system of Livesay for the purpose of providing a hierarchical data mapping.

As per claim 46, Livesay and Swamy teach:

**The computer-readable medium of Claim 45, wherein the software is further configured to: receive input from at least one of a plurality of buyer computers indicating one or more source classes to be associated with one or more target classes;**

(Paragraph [0155], wherein the input parameter links buyer to seller)(Livesay).

**and associate the source classes with the target classes in response to the input from at least one of the plurality of buyer computers** (Paragraph [0155], wherein the input parameter links buyer to seller)(Livesay).

As per claim 47, Livesay and Swamy teach:

**The computer-readable medium of Claim 46, wherein the software is further configured to: generate a graphical representation of the taxonomies of the source and target schemas, the graphical representation allowing at least one of the plurality of buyer computers to graphically associate classes of the source schema with classes of the target schema;**

(Column 3, lines 1-7)(Swamy).

**and communicate the graphical representation to at least one of the plurality of buyer computers.**

(paragraph [0161])(Livesay) wherein the link is the graphical communication between buyer and seller).

As per claim 48, Livesay and Swamy teach:

**The computer-readable medium of Claim 45, wherein the source classes are leaf classes of the source schema. (FIG. 8A wherein the bottom-up approach is leaf classes)(Swamy).**

As per claim 49, Livesay and Swamy teach:

**The computer-readable medium of Claim 45, wherein the software is further configured to generate a product ontology for a target class by determining the intersection of the product attributes included in the product ontologies of the associated source classes.**

(Paragraph [0136], wherein the determining profile link based on “best fit” profile content (product ontology) is determining association between product parameters between seller and buyer)(Livesay).

As per claim 50, Livesay and Swamy teach:

**The computer-readable medium of Claim 45, wherein the software is further configured to generate a product ontology for a parent class of a plurality of target classes by determining the intersection of the product attributes included in the product ontologies of the target classes.**

(Paragraph [0136], wherein the determining profile link based on “best fit” profile content (product ontology) is determining association between product parameters between seller and buyer)(Livesay).

As per claim 51, Livesay and Swamy teach:

**The computer-readable medium of Claim 45, wherein:**

**at least the source schema further comprises a seller ontology associated with one or more of the classes, each seller ontology comprising one or more attributes associated with one or more sellers of a product (Paragraph [0136], wherein the determining profile link with best fit criteria (ontologies) is determining association between product parameters between seller and buyer)(Livesay).**

**and the software is further configured to generate a seller ontology for each of the target classes based on the seller ontologies of the associated source classes** (Paragraph [0136], wherein the determining profile link with best fit criteria (ontologies) is determining association between product parameters (attributes) between seller and buyer)(Livesay).

As per claim 52, Livesay and Swamy teach:

**The computer-readable medium of Claim 45, wherein:**

**one or more pointers identifying one or more seller databases are associated with at least one source class** (Paragraphs [0088] and [0129], indicate the database product identification linking the buyer and seller)(Livesay).

**the seller databases including product data associated with one or more products categorized in the source class** (Paragraphs [0088] and [0129], indicate the database product identification linking the buyer and seller)(Livesay).

**And the software is further configured to associate the pointers of the source class with one or more target classes associated with the source class** (Column 3, lines 1-7)(Swamy).

As per claim 54, Livesay discloses:

**A electronic commerce system, comprising:**

**a global content directory server coupled with one or more seller databases over a network,**  
(Abstract: lines 1-2 and FIG. 4, components 401 and 406)

**the global content directory server providing a plurality of buyer computers access to the one or more seller databases** (Paragraphs [0088] and [0129], indicate global content directory (FIG. 4, components 401 and 406) providing the buyer access to the seller database), **the global content directory server comprising:**

Art Unit: 2165

**a storage medium stored therein a schema translation tool comprising:**

**a storage medium stored therein a mapping module configured to:**

**at least the source schema further comprising a product ontology associated with one or more of the classes, each product ontology comprising one or more product attributes,**

(Paragraph [0019], wherein the seller database (source schema) having goods in categories (attribute)).

**at least the source schema further comprising one or more pointers identifying one or more seller databases and associated with one or more classes** (Paragraphs [0088] and [0129], indicate the database product identification linking the buyer and seller)(Livesay).

**the one or more seller databases including product data associated with one or more products categorized in the classes** (Paragraphs [0088] and [0129], indicate the database product identification linking the buyer and seller)(Livesay).

**communicate the graphical representation to at least one of the plurality of buyer computers** (paragraph [0161])(Livesay) wherein the link is the graphical communication between buyer and seller).

**receive input from at least one of the plurality of buyer computers indicating one or more source classes of the source schema to be associated with one or more target classes of the target schema** (paragraph [0161])(Livesay) wherein the link is the graphical communication between buyer and seller).

**associate one or more source classes with one or more target classes in response to the input from at least one of the plurality of buyer computers** (Paragraph [0019], wherein the profile link is the association of seller's (source schema) with the buyer (data, target schema)).

**and associate the pointers of the source classes with one or more target classes associated with the source class** (paragraph [0161])wherein the link is the pointer between buyer and seller).

**and a storage medium stored therein an ontology generation module configured to generate a product ontology for each of the target classes based on the intersection of the product attributes included in the product ontologies of the associated source classes** (Paragraph [0019], wherein the profile link is the association of seller's (source schema) with the buyer (data, target schema)).

**generate a graphical representation of the taxonomies of the source and target schemas, the graphical representation allowing at least one of a plurality of buyer computers to graphically associate the classes of the source schema with classes of the target schema** (Paragraph [0019] and [0155], wherein the link is the graphical presentation).

Livesay discloses receiving data and translating (mapping) to standard XML or EDI (Paragraph [0079]) but does not go into detail regarding the graphical mapping tool product, however in an analogous art of data mapping/translating, Swamy teaches:

**receive information regarding a source schema and a target schema, the source and target schemas each comprising a taxonomy comprising a hierarchy of classes into which products may be categorized** (FIG. 11 and Column 2, lines 58-66).

**wherein the target schema comprises a different taxonomy then the taxonomy of the source schema.** (Column 1, lines 22-28 and FIG. 11 and Column 2, lines 58-66).

Therefore, it would have been obvious to a person in the ordinary skill in the art at the time of the invention to combine Livesay and Swamy by incorporating the teaching of Swamy into the system of Livesay. One having ordinary skill in the art would have found it motivated to use the mapping tool of Swamy into the system of Livesay for the purpose of providing a hierarchical data mapping.

As per claim 55, Livesay discloses:

**A method for translating between schemas, comprising:**

**at least the source schema further comprising a product ontology associated with one or more of the classes, each product ontology comprising one or more product attributes,**

(Paragraph [0019], wherein the seller database (source schema) having goods in categories (attribute)).

**at least the source schema further comprising one or more pointers identifying one or more seller databases and associated with one or more classes** (Paragraphs [0088] and [0129], indicate the database product identification linking the buyer and seller)(Livesay).

**the one or more seller databases including product data associated with one or more products categorized in the classes** (Paragraphs [0088] and [0129], indicate the database product identification linking the buyer and seller)(Livesay).

**generating, by the server, a graphical representation of the taxonomies of the source and target schemas, the graphical representation allowing at least one of a plurality of buyer computers to graphically associate the classes of the source schema with classes of the target schema** (Paragraph [0019], wherein the profile link is the association of seller's (source schema) with the buyer (data, target schema)).

**communicating, by the server, the graphical representation to at least one of the plurality of buyer computers** (paragraph [0161])wherein the link is the graphical communication between buyer and seller).

**receiving, by the server, input from at least one of the plurality of buyer computers indicating one or more source classes of the source schema to be associated with one or more target classes of the target schema** (Paragraph [0155], wherein the input parameter links buyer to seller).

**associating, by the server, one or more source classes with one or more target classes in response to the input from at least one of the plurality of buyer computers** (Paragraph [0155], wherein the input parameter links buyer to seller).

**associating, by the server, the pointers of the source classes with one or more target classes associated with the source class** (paragraph [0161]) wherein the link is the pointer between buyer and seller).

**and generating, by the server, a product ontology for each of the target classes based on the intersection of the product attributes included in the product ontologies of the associated source classes** (Paragraph [0019], wherein the profile link is the association of seller's (source schema) with the buyer (data, target schema)).

Livesay discloses receiving data and translating (mapping) to standard XML or EDI (Paragraph [0079]) but does not go into detail regarding the graphical mapping tool product, however in an analogous art of data mapping/translating, Swamy teaches:

**receiving, by a server, information regarding a source schema and a target schema, the source and target schemas each comprising a taxonomy comprising a hierarchy of classes into which products may be categorized** (FIG. 11 and Column 2, lines 58-66).

Therefore, it would have been obvious to a person in the ordinary skill in the art at the time of the invention to combine Livesay and Swamy by incorporating the teaching of Swamy into the system of Livesay. One having ordinary skill in the art would have found it motivated to use the mapping tool of Swamy into the system of Livesay for the purpose of providing a hierarchical data mapping.

As per claim 56, Livesay discloses:

**A computer-readable medium embodied with software for translating between schemas, the software when executed using one or more computers is configured to:**

**at least the source schema further comprising a product ontology associated with one or more of the classes, each product ontology comprising one or more product attributes** (Paragraph [0019], wherein the seller database (source schema) having goods in categories (attribute)).



**at least the source schema further comprising one or more pointers identifying one or more seller databases and associated with one or more classes** (Paragraphs [0088] and [0129], indicate the database product identification linking the buyer and seller)(Livesay).

**the one or more seller databases including product data associated with one or more products categorized in the classes** (Paragraphs [0088] and [0129], indicate the database product identification linking the buyer and seller)(Livesay).

**communicate the graphical representation to at least one of the plurality of buyer computers** (paragraph [0161])wherein the link is the graphical communication between buyer and seller).

**receive input from at least one of the plurality of buyer computers indicating one or more source classes of the source schema to be associated with one or more target classes of the target schema** (Paragraph [0155], wherein the input parameter links buyer to seller).

**associate one or more source classes with one or more target classes in response to the input from at least one of the plurality of buyer computers** (Paragraph [0155], wherein the input parameter links buyer to seller).

**associate the pointers of the source classes with one or more target classes associated with the source class** (Paragraph [0155], wherein the input parameter links buyer to seller).

**and generate a product ontology for each of the target classes based on the intersection of the product attributes included in the product ontologies of the associated source classes** (Paragraph [0019], wherein the profile link is the association of seller's (source schema) with the buyer (data, target schema)).

**generate a graphical representation of the taxonomies of the source and target schemas, the graphical representation allowing at least one of a plurality of buyer computers to graphically associate the classes of the source schema with classes of the target schema** (Paragraph [0019] and [0155], wherein the link is the graphical presentation).

Art Unit: 2165

Livesay discloses receiving data and translating (mapping) to standard XML or EDI (Paragraph [0079]) but does not go into detail regarding the graphical mapping tool product, however in an analogous art of data mapping/translating, Swamy teaches:

**receive information regarding a source schema and a target schema, the source and target schemas each comprising a taxonomy comprising a hierarchy of classes into which products may be categorized,** (FIG. 11 and Column 2, lines 58-66).

Therefore, it would have been obvious to a person in the ordinary skill in the art at the time of the invention to combine Livesay and Swamy by incorporating the teaching of Swamy into the system of Livesay. One having ordinary skill in the art would have found it motivated to use the mapping tool of Swamy into the system of Livesay for the purpose of providing a hierarchical data mapping.

### **Conclusion**

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2165

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tarek Chbouki whose telephone number is 571-2703154. The examiner can normally be reached on Mon-Fri 7:30 am to 5:00 pm EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Neveen Abel-Jalil can be reached at 571-2724074. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. C./

Examiner, Art Unit 2165

11/08/2009

/Neeven Abel-Jalil/

Supervisory Patent Examiner, Art Unit 2165